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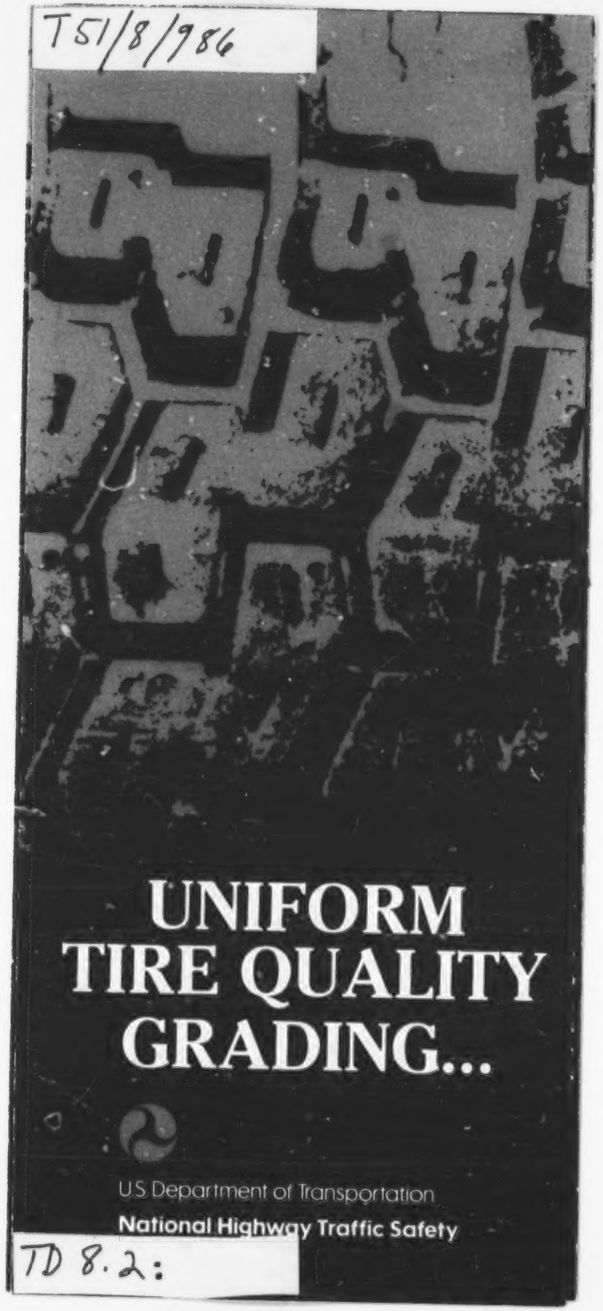

# UNIFORM TIRE QUALITY GRADING...

U.S Department of Transportation

National Highway Traffic Safety

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Few consumer products on the market today offer the reliability and value of modern automobile tires. Their dependability is very high, especially considering their complexity and the demanding driving and road conditions to which they are subjected during their lifetime.

But buying new tires can be confusing. Many people rely on recommendations from service stations or tire dealers where they have been treated well in the past, buy from a store that offers a variety of brands at discount prices, or make their decision based on loyalty to a certain manufacturer whose tires have given good service previously. Regardless of where you buy them . . . or how much you pay . . . all tires sold today are required to meet federal safety standards.

Many consumers wonder what they should look for when shopping for new tires. For example, "Is a $65 tire 'better' than a $45 one?" The answer to that question is, "Maybe, but not necessarily."

Some tire buyers are likely to assume that the higher price . . . the "better" the tire. Tire advertising can further complicate the decision on what tire to buy. A "premium" tire from one manufacturer can be quite different from another company's "premium" tire.

The truth is, **how** the tire is used, your personal **driving style**, the **type of car** you drive, **where** you drive and what kind of **tire maintenance** you perform routinely can influence tire life more than the brand name and the price you paid.

### Uniform Tire Quality Grading System

The Uniform Tire Quality Grading System (UTQGS) is a tire information system designed to help buyers make relative comparisons among tires. The UTQGS is **not** a safety rating and **not** a guarantee that a tire will last for a prescribed number of miles or perform a certain way. It simply gives tire buyers additional information to combine with other considerations, such as price, brand loyalty and dealer recommendations. Under UTQGS, tires are graded by the manufacturers in three areas: treadwear, traction and temperature resistance.

UTQGS information is right where you need it . . . on the tires. The grades can be found on two places on the tire: there's a paper label affixed to the tread, and the grades are also molded into the sidewalls. Additionally, brochures which explain the tire grades are available at tire stores.

### Traction

Traction grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on asphalt and concrete test surfaces. The traction grades from highest to lowest, are "A", "B", and "C". A tire graded "A" may have relatively

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better traction performance than a tire graded "B" or "C," based on straight ahead braking tests. The grades do not reflect the cornering or turning traction performance of the tires.

### Temperature

Temperature grades represent the tire's resistance to heat and its ability to dissipate heat when tested under controlled laboratory test conditions. Sustained high temperature can cause the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The temperature grades from highest to lowest are "A", "B", and "C". The grade "C" corresponds to the minimum performance required by federal safety standard. Grades "B" and "A" represent higher levels of performance than the minimum required by law. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure.

### Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under carefully controlled conditions. For example, a tire graded 200 should have its useful tread last twice as long as a tire graded 100. However, real world tire tread life, in miles, depends on the actual conditions of their use. Tire life is affected by variations in driving habits, service practices . . . such as tire rotation, wheel alignment, and maintaining proper inflation pressure . . . and differences in road characteristics and climate.

### Common Questions

**Q. What does the TRACTION grade tell me about the tire?**

**A.** In a straight line stop, the "A" graded tire should allow you to stop your car on wet roads in a shorter distance than tires graded "B" or "C". When driving on wet roads, good traction is important to your safety. Tires graded "C" offer the least traction on wet roads.

**Q. Is the ability to stop the car affected by anything besides the tire grade?**

**A.** Yes. When the tread is badly worn, all tires lose much of their stopping ability, especially on wet roads. For safety reasons, it is important to replace tires when the built-in treadwear indicators begin to show (you will see lines across the tread) or when the grooves in the tread measure only 1/16 of an inch deep (about the thickness of a nickel). Regardless of the traction grade, a bald tire is dangerous. Keep in mind, that properly maintained brakes are also extremely important to stopping performance.

**Q. Is TRACTION improved if you let some air out the tires, below recommended pressures?**

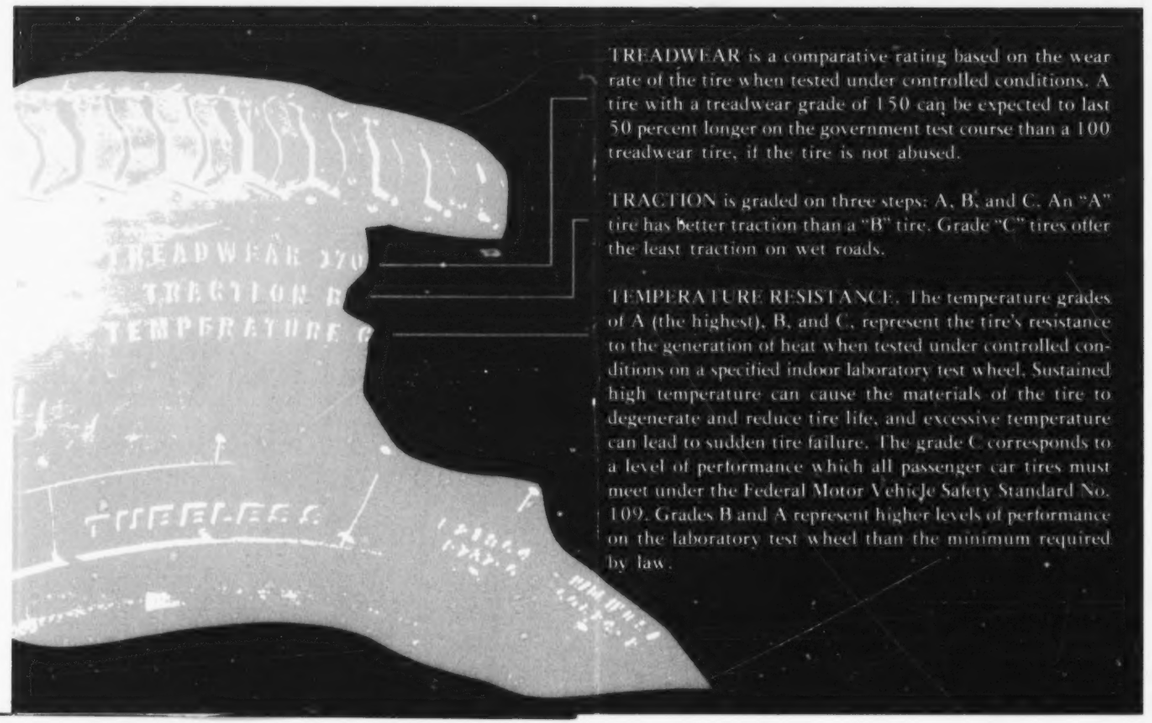
**A.** No. In fact, this is a dangerous practice. Underinflation does not improve traction. It causes the tire to run hot, which can damage it and increase the risk of a blowout. It will also wear out the tread faster and reduce your car's fuel economy. Proper tire pressure information can be found in the vehicle owner's manual and on the tire information placard on the vehicle.

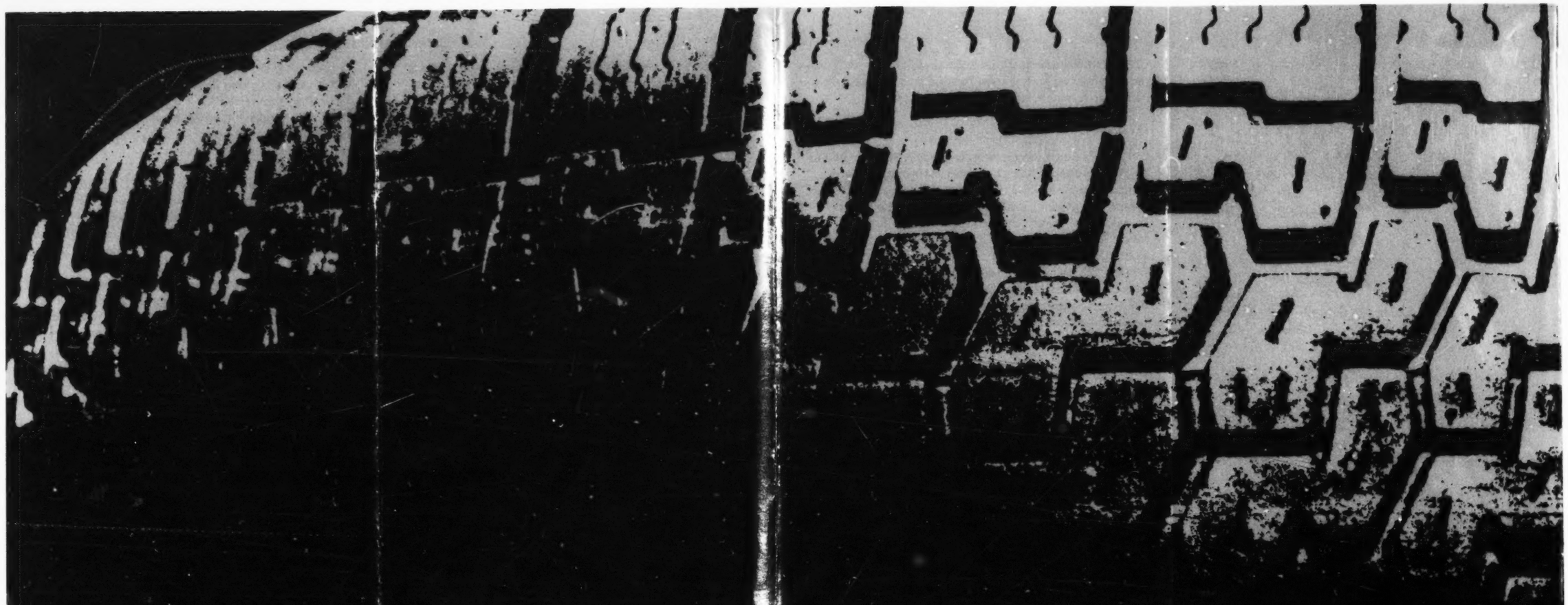
**Q. What does the TEMPERATURE RESISTANCE grade tell me about a tire?**

**A.** Sustained high temperatures can cause the tire material to degenerate and excessive temperatures can lead to blowouts and tread separations. The "A" rating signifies the coolest running tire. If the vehicle and tires are maintained and operated properly, they should perform safely and reliably when run at the speed limit, even in very hot weather. "C" tires run hotter than tires graded "A" or "B", but a "C" graded tire is not "unsafe." Keep in mind that under-inflation or overloading will overheat and damage **any** tire and greatly increase the likelihood of a blowout.

**Q. What significance does the TEMPERATURE RESISTANCE grade have for me as a driver?**

**A.** If you often drive at highway speeds for periods of an hour or more, there is less chance a cooler-running "A" graded tire will overheat than a "B" or "C" graded tire. All tires will perform safely and reliably when driven at the speed limit, but the higher graded tires will give you a greater margin of safety. Your individual driving habits and the amount of time you spend driving in hot climates or at highway speeds should determine how much emphasis you put on the temperature resistance grade.


TREADWEAR is a comparative rating based on the wear rate of the tire when tested under controlled conditions. A tire with a treadwear grade of 150 can be expected to last 50 percent longer on the government test course than a 100 treadwear tire, if the tire is not abused.
TRACTION is graded on three steps: A, B, and C. An "A" tire has better traction than a "B" tire. Grade "C" tires offer the least traction on wet roads.
TEMPERATURE RESISTANCE. The temperature grades of A (the highest), B, and C, represent the tire's resistance to the generation of heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the materials of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.



Q. Is the temperature of my tires affected by anything other than the assigned grade?

A. Yes. All tires will run at higher temperatures when they are underinflated or overloaded. It is very important to check the pressure in all of your tires before starting out on a trip where you will be driving at highway speeds for more than an hour. Always inflate the tires to the recommended pressures *before* starting on the trip. This precaution will help any tire run cooler.

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Q. What does the TREADWEAR grade tell about a tire

A. The higher the number, the greater tread life you shou expect. A tire with a grade of 200 should give you twic as much mileage as one rated at 100, provided that yo keep the tires inflated properly, the wheels aligned an tires balanced, and drive them under normal condition Failure to care for your tires will greatly reduce the trea life and can also create a safety hazard. *How* you drive and under what road conditions, also affects treadwea

Q. So the TREADWEAR grade will not tell me for certain how many miles of tread life I can expect?

A. Correct. It is not a measure of the tread life. It indicates only that, under the same general conditions, one tire can be expected to produce more mileage than another, not what the mileage will be. Again, actual tread life is influenced strongly by where you live and how you drive. In some parts of the country, tires wear out faster. For example, the local rock used for road construction is rougher in some geographical areas than in others. The same tire might give 20,000 miles in one part of the country and 30,000 in another, but a tire with a higher grade should produce better tread life than a lower graded tire in either locality.

Q. Will all drivers get the same mileage on the same grade of tire?

A. No. Mileage is determined primarily by driving habits. Drivers who start off slowly can expect the best tread life. Those who consistently make "jack rabbit" starts and stops, and fast, tire-screeching turns will get the least. Studies have shown that treadwear for the same tire can be as low as 14,000 miles for some drivers, but as high as 30,000 miles for other drivers in the same geographical area. Proper maintenance is also important. Under- or over-inflation, unbalanced wheels, and wheel misalignment result in uneven treadwear that causes the tire to wear out prematurely.